





EQUIPMENT LAYOUT

WIRING DIAGRAM

LIST OF MATERIALS	
ITEM	DESCRIPTION
2	RIGID CONDUIT *
4	NEMA 4, DUST-TIGHT, WATERTIGHT CABINET
5	GROUND ROD, $\frac{3}{4}$ " DIA, X 8' MIN.
6	PHOTOELECTRIC SWITCH AND SOCKET, 105/285 V., 1000 WATT
7	TRANSLUCENT, PLEXIGLASS FILTER #W2067, \frac{1}{8}" THICK
8	CLEAR, LEXAN #9034 WINDOW, 4" THICK MIN.
9	MOUNTING PAN, $31\frac{1}{2}'' \times 12'' \times \frac{1}{4}''$ ALUMINUM OR STAINLESS STEEL
10	PLIABLE SEALANT
1 1	LIFETIME SILICONE CAULK
14	INSULATED TERMINAL BLOCK, FOR GREATER THAN 4/0 CABLE
15(240V)	2-POLE, 100 AMP, 120V COIL LIGHTING CONTACTOR
15(480V)	2-POLE, 100 AMP, 240V COIL LIGHTING CONTACTOR
16	2-POLE, 650 VOLT LIGHTING ARRESTER
17	1-POLE, 15 AMP, TYPE B CONTROL BREAKER
18	1-POLE, 15 AMP, TYPE B MANUAL-AUTO SWITCH
19	INSULATED GROUNDABLE NEUTRAL, 100 AMP
20	2-POLE, 100 AMP, TYPE A MAIN BREAKER
21	2-POLE, 15 AMP(MIN), TYPE A LIGHTING BREAKERS
22	#12 AWG MIN., 600 V. CONTROL CABLE
23	#2 AWG MIN., 600 V. * POWER CABLE
24	#2 AWG MIN., 600 V. GROUND CABLE
*	SEE PLANS

NOTES

- (B) LIGHTING SYSTEM VOLTAGE AS SPECIFIED ON PLANS.
- C PHOTOELECTRIC SWITCH BRACKETS MAY VARY, LOCATE CENTER OF WINDOW OVER CENTER OF PHOTOELECTRIC SWITCH.
- E IF FOR REASONS OF VOLTAGE DROP A WIRE SIZE IS SPECIFIED LARGER THAN THE BREAKER LUGS CAN ACCOMMODATE, AN INSULATED HEAVY DUTY TERMINAL BLOCK SHALL BE INSTALLED TO TERMINATE THE LARGER WIRES AND A SMALLER JUMPER CONNECTED TO THE BREAKER ITSELF.
- (F) LIGHTING BREAKER SIZING:

240V TOTAL 480V TOTAL

SIZE (AMPS) CIRCUIT LDAD (WATTS) 0-2800 0 - 5500
20 2850-3700 5550 - 7400
25 3750-4600 7450 - 9200
30 4650-5500 9250 - 11,000
35 550-6500
40 6550-7400 -
CIRCUIT LDAD INCLUDES LDAD DUE TO LINE LOSS, LAMP, AND BALLAST LOAD.

G ALL CIRCUIT BREAKERS SHALL CONFORM TO SECTION 901.4 OF THE STANDARD SPECIFICATIONS.

HIGHWAY LIGHTING

BASE MOUNTED

CONTROL STATION

240 V OR 480 V - 4 CIRCUIT

DATE:

EFFECTIVE: 04-01-2005 901.30F 2